AMENDED CLAIM SET

The claims have been amended as set forth in the following listing of the claims:

1. (currently amended) A method for correcting speed feedback in a synchronous permanent-magnet ~~motor~~drive motor for imparting accurate upward and downward travel to a load, the steps comprising:

measuring a speed value of the synchronous permanent-magnet motor by a feedback sensor;

calculating averages of a speed reference and a speed measurement for downward and upward constant-speed travel;

identifying gain and zero factors from said calculated averages; and

correcting the measured speed value utilizing said gain and zero factors to compensate for drift in the feedback sensor.

2. (previously presented) The method according to claim 1, wherein the averages of speed reference and speed measurement are calculated using a sum of the speed values and a total number of samples of the speed values.

3. (previously presented) The method according to claim 2, wherein the gain factor and zero factor are identified each time the averages of speed reference and speed measurement are calculated.

4. (previously presented) The method according to claim 3, wherein the gain factor and zero factor are updated by a forgetting factor.

5. (previously presented) The method according to claim 3, wherein the gain factor and zero factor are updated by an exponential forgetting factor.

6. (previously presented) The method according to claim 4, wherein, by applying the forgetting factor, measurement samples of recent history are weighted greater than earlier measurement samples.

7. (currently amended) The method according to claim 1, wherein the method is adaptive to continuously update parameters for correcting said measured speed value.

8. (previously presented) The method according to claim 1, wherein the synchronous permanent-magnet motor is an elevator drive machine.

9. (previously presented) An apparatus for correcting measured speed feedback, the apparatus comprising:

a measuring unit for measuring a speed value of a synchronous permanent-magnet motor;

a calculating unit for calculating averages of a speed reference and a speed measurement from the measured speed value;

an identifying unit for identifying a gain factor and a zero factor; and

a correcting unit for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor.